

REMARKS/ARGUMENTS

Favorable reconsideration of this application as currently amended and in view of the following remarks is respectfully requested.

Claims 1-3, 5-16, and 18-25 are currently active in this case. Claims 11, 5, 6, 11, 14, 18, and 19 have been amended by the current amendment. No new matter has been added.

In the outstanding Office Action, claim 14 was objected to; claim 5 was rejected under 35 USC 112, second paragraph, as being indefinite; claims 1, 2, 5, 12-16, 18, 24, and 25 were rejected under 35 USC 102(e) as being anticipated by U.S. Patent No. 7,047,724 to Nordeen et al.; claims 1 and 14 were rejected under 35 USC 102(e) as being anticipated by U.S. Patent No. 7,055,308 to Pinard et al.; claims 5 and 18 were rejected under 35 USC 102(b) as being anticipated by U.S. Patent No. 3,877,219 to Hagen; claims 5 and 18 were rejected under 35 USC 102(b) as being anticipated by U.S. Patent No. 4,175,380 to Baycura; and claims 6-9 and 19-21 were rejected under 35 USC 102(b) as being anticipated by U.S. Patent No. 7,150,143 to Schick.

Claims 3, 10, 11, 22, and 23 were objected to as being dependent upon a rejected based claim, but were indicated as being allowable if rewritten in independent form. Applicants acknowledge with appreciation the indication of allowable subject matter. However, because Applicants believe they are entitled to the scope of protection defined by the independent claims, claims 3, 10, 11, 22, and 23 have been maintained in dependent form.

In response to the objection to claim 14, claim 14 has been amended to correct the misspelling of “tubular”.

In response to the rejection of claim 5, claim 5 has been amended to clarify that the first and second turbines are disposed on opposite ends of a common rotor shaft. In view of this clarifying amendment, no further rejection to claim 5 is anticipated.

The present invention is directed to a pulse detonation engine system including, among other things, a turbine driven by impact energies of detonation waves intermittently generated in a tubular hollow section of a detonation tube; a boiler configured to generate steam; and a bypass flow passage configured to directly provide the steam generated by the boiler to the turbine in order to continuously operate the turbine.

In contrast thereto, neither Nordeen et al. nor Pinard et al. disclose a bypass passage for continuously operating a turbine using steam from a boiler. That is, Nordeen et al. teach in column 3, lines 40-55 that a core air flows through a bypass portion passing the combustor section 132 and is then mixed with the core air flowing through the combustor. Further, Pinard et al. teach in paragraph [0332], and illustrates in FIG. 8, that the configuration disclosed in FIG. 8 purges a porous liner 10 with cooling air using a bypass flow. Thus, Applicants respectfully submit that the present invention uses a bypass flow configuration which is quite different from that taught by Pinard et al. and Nordeen et al.

For the foregoing reasons, neither Nordeen et al. nor Pinard et al. are believed to anticipate or render obvious the subject matter defined by claims 1 and 14 when considered alone or in combination.

An early and favorable action is therefore respectfully requested.

Respectfully submitted,

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